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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,359	01/18/2002	Mitsuru Asano	09792909-5303	9291

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EXAMINER

KUMAR, SRILAKSHMI K

ART UNIT	PAPER NUMBER
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2675

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/051,359

Applicant(s)

ASANO ET AL.

Examiner

Srilakshmi K. Kumar

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on August 22, 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following is in response to the Request for Continued Examination and amendment filed August 22, 2005. Claims 1-7 have been amended.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walsh (US 6,351,327 B1) in view of Brody (US 4,982,273).

As to independent claim 1, Walsh discloses a light emitting display (col. 3, lines 9-19). In col. 2, line 38, Walsh discloses an active display area, and as shown by Fig. 2a, a matrix type display; further comprising, a substrate (col. 4, lines 6-15); a device layer provided on the substrate (col. 4, lines 6-15), the device layer comprising luminescent devices defining pixel units arrayed in a matrix (col. 3, lines 10-24); a circuitry layer provided between the substrate (col. 4, lines 38-49, col. 5, lines 53-67) and the device layer, the circuitry layer comprising pixel circuits for driving the respective luminescent devices (col. 4, lines 38-49, col. 5, lines 53-67), the pixel circuits defining the pixel units (col. 4, lines 38-49, col. 5, lines 53-67); Walsh does not disclose contacts, electrically connecting each of the luminescent devices with a corresponding pixel circuit, wherein the contacts are not provided under the emitting area of the luminescent devices. Brody discloses contacts (Figs 4b and 4c, item 27, col. 7, line 54-col. 8, lines 18), wherein the contacts are not provided under the emitting area of the luminescent devices, as in

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Fig. 4b, the contacts (27) are shown to be at the edges of the emitting areas. It would have been obvious to one of ordinary skill in the art to include the contacts for the row or column of the display as disclosed by Brody in col. 2, lines 65-col. 3, lines 20 to improve image quality.

As to independent claim 6, limitations of claim 1, and further comprising, an organic layer including a luminescent layer and lying between the upper electrode and the lower electrode. Walsh discloses in the abstract where Indium Tin Oxide, which is an organic substance, is sandwiched between the layers.

As to dependent claim 2, limitations of claim 1, and further comprising, wherein the contacts are arrayed in a single dimension for each row or column in the matrix. Walsh does not disclose where the contacts are arrayed in a single dimension for each row or column in the matrix. In a similar field of endeavor, Brody discloses a flat screen color display comprising an active matrix and where the contacts are arrayed in a single dimension in Figs. 4a and 7 and in col. 7, line 54-col. 8, lines 18. Brody discloses conductive pads (19) and thin film transistors (23), where the conductive pads are charged through the drains (27). It would have been obvious to one of ordinary skill in the art to include the contacts for the row or column of the display as disclosed by Brody in col. 2, lines 65-col. 3, lines 20 to improve image quality.

As to dependent claim 3, limitations of claim 2, and further comprising, wherein the contacts for the pixel units belonging to two adjacent rows or columns in the matrix are arrayed in a single dimension between the two adjacent rows or columns. Walsh does not teach where the contacts for the pixel units belonging to two adjacent rows or columns in the matrix are arrayed in a single dimension between two adjacent rows or columns. In a similar field of endeavor, Brody discloses a flat screen color display comprising an active matrix and where the

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contacts are arrayed in a single dimension in Figs. 4a and 7 and in col. 7, line 54-col. 8, lines 18. Brody discloses conductive pads (19) and thin film transistors (23), where the conductive pads are charged through the drains (27). In Fig. 4a, Brody teaches where the contacts (27) are shown to be adjacent to one another. It would have been obvious to one of ordinary skill in the art to include the contacts for the row or column of the display as disclosed by Brody in col. 2, lines 65-col. 3, lines 20 to improve image quality.

As to dependent claim 4, limitations of claim 1, and further comprising, wherein the luminescent devices are organic electroluminescence devices, each comprising a first electrode, a second electrode and an organic layer including an luminescent layer and lying between the first electrode and the second electrode (col. 1, lines 10-24, col. 4, lines 6-15, 38-49, col. 5, lines 35-67).

As to dependent claims 5 and 7, limitations of claims 1 and 6, and further comprising, wherein the pixel circuits each comprise a thin film transistor. Walsh does not disclose where the pixel circuits each comprise a thin film transistor. In a similar field of endeavor, Brody discloses, in col. 7, lines 56, where each pixel comprises a thin film transistor. It would have been obvious to one of ordinary skilled in the art to include the thin film transistor of Brody into that of Walsh Brody discloses in col. 2, line 65-col. 3, line 28 where the use of TFT provides for a flat screen display and higher image quality.

Response to Arguments

3. Applicant's arguments filed August 22, 2005 have been fully considered but they are not persuasive.

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In applicant's response to the office action of April 25, 2005, Applicant has amended the claims to include a light emitting device. Applicant, in the remarks, discloses support for this amendment. Applicant argues where prior art Walsh in view of Brody, fail to disclose or suggest a light emitting display. Walsh in col. 3, lines 9-19 discloses a light emitting display, where the device layer comprising luminescent devices defining pixel units arrayed in a matrix. And in col. 4, lines 38-49 and col. 5, lines 53-67, Walsh discloses the device layer, the circuitry layer comprising pixel circuits for driving the respective luminescent devices.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srilakshmi K. Kumar whose telephone number is 571 272 7769. The examiner can normally be reached on 10:00 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 571 272 3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Srilakshmi K. Kumar
Examiner
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SKK

September 17, 2005


CHANH NGUYEN
PRIMARY EXAMINER